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PTO/SB/21 (09-04)  
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<b>TRANSMITTAL FORM</b>  <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/823,483
	Filing Date	04/12/2004
	First Named Inventor	Avto TAVKHELIDZE
	Art Unit	
	Examiner Name	
Total Number of Pages in This Submission	7	Attorney Docket Number

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Firm Name			
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Date	10/18/2004	Reg. No.	

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U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 3,578,992	05-18-1971	Shimada, K.	
		US- 3,740,592 A	06-19-1973	Engdahl et al.	
		US- 3,843,896	10-22-1974	Rason et al.	
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		US- 4,937,489	06-26-1990	Hattori, S.	
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Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
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		Number-Kind Code <sup>2</sup> (if known)			
		US- 5,233,205	08-03-1993	Usagawa, T.	
		US- 5,229,320	07-20-1993	Ugajin, R.	
		US- 5,247,223	09-21-1993	Mori, Y.	
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		US- 5,699,668 A	12-23-1997	Cox, I.W.	
		US- 5,701,043	12-23-1997	Razzaghi, M.	
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		US- 5,810,980	09-22-1998	Edelson, J.S.	

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		Number-Kind Code <sup>2</sup> (if known)			
		US- 5,874,039	02-23-1999	Edelson, J.S.	
		US- 5,917,156 A	06-29-1999	Nobori et al.	
		US- 5,981,071	11-09-1999	Cox, I.W.	
		US- 5,981,866	11-09-1999	Edelson, J.S.	
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		US- 5,994,638	11-30-1999	Edelson, J.S.	
		US- 6,084,173	07-04-2000	DiMatteo	
		US- 6,064,137	05-16-2000	Cox, R.T.	
		US- 6,089,311	07-18-2000	Edelson, J.S.	
		US- 6,225,205 B1	05-01-2001	Kinoshita	
		US- 6,281,514	08-28-2001	Tavkhelidze, A.	
		US- 6,214,651 B1	04-10-2001	Cox	
		US- 2001/0046749 A1	11-29-2001	Tavkhelidze et al.	
		US- 6,417,060 B2	07-09-2002	Tavkhelidze et al.	
		US- 2003/0068431 A1	04-10-2003	Taliashvili et al.	
		US- 6,720,704 B1	04-13-2004	Tavkhelidze et al.	
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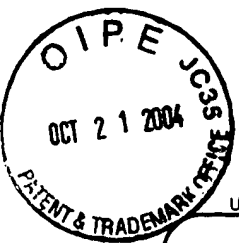
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		Number-Kind Code <sup>2</sup> (if known)			
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		US- 2,915,652	12-01-1959	Hatsopoulos, G.N.	
		US- 3,021,472	02-13-1962	Hernqvist, K.G.	
		US- 3,118,107	01-14-1964	Gabor, D.	
		US- 3,194,989	07-13-1965	Garbuny	
		US- 3,169,200	02-09-1965	Huffman, F.N.	
		US- 3,173,032	03-09-1965	Maynard, J.T.	
		US- 3,238,395	03-01-1966	Sense, K.A.	
		US- 3,239,745	03-08-1966	Hernqvist, K.G.	
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		SU 861916 A	09-10-1981	Burmistrov, V.M		
		JP 404080964A	03-13-1992	Ando, Y.		
		WO 97/02460 A1	01-23-1997	Edelson, J.S.		
		WO 99/13562 A1	03-18-1999	Tavkhelidze et		
		WO 03/090245 A1	10-30-2003	Tavkhelidze et		

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		FITZPATRICK, G.O. ET AL. "Close-Spaced Thermionic Converters with Active Spacing Control and Heat Pipe Isothermal Emitters." IEEE.vol. 2: pp 920-927 (1996).	
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		MAHAN, G.D. "Thermionic Refrigeration." J. Appl. Phys 76: pp 4362-4366 (1994).	
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		HOUSTON. J.M. "Theoretical Efficiency of the Thermionic Energy Converter." J.Appl. Phys. 30: pp 481-487 (1959).	
		KING. D.B. ET AL. "Results from the Microminiature Thermionic Converter Demonstration Testing Program." Am. Inst. of Phys. 1-56396-846: pp 1432-1436 (1999).	
		ZENG. T AMD CHEN. G. "Hot Electron Effects on Thermionic Emission Cooling in Heterostructures." Mat. Res. Soc. 545: pp 467-472 (1999).	
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		FUKUDA. R. ET AL. "Development of the Oxygenated Thermionic Energy Converters Utilizing the Sputtered Metal Oxides as a Collector." Am. Inst. Phys. pp 1444-1451 (1999).	
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>		<i>Complete if Known</i>	
		Application Number	10/823,483
		Filing Date	04/12/2004
		First Named Inventor	Avto TAVKHELIDZE
		Art Unit	
		Examiner Name	
Sheet	6	of	6
		Attorney Docket Number	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		FITZPATRICK G O ET AL: "Updated perspective on the potential for thermionic conversion to meet 21st century energy needs" IECEC'97. PROCEEDINGS OF THE 32nd INTERSOCIETY ENERGY CONVERSION ENGINEERING CONFERENCE. ENERGY SYSTEMS, RENEWABLE ENERGY RESOURCES, ENVIRONMENTAL IMPACT AND POLICY IMPACTS ON ENERGY. HONOLULU, HI. JULY 27 - AUG. 1, 1997. INTERSOCIETY ENERGY CONVERS. vol 3 & 4, 27 July 1997 (1997-07-27). pages 1045-1051.	
		KALANDARISHVILI A G: "The basics of the technology of creating a small interelectrode spacing in thermionic energy converters with the use of two-phase systems" IECEC'97. PROCEEDING OF THE 32nd INTERSOCIETY ENERGY CONVERSION ENGINEERING CONFERENCE. ENERGY SYSTEMS, RENEWABLE ENERGY RESOURCES, ENVIRONMENTAL IMPACT AND POLICY IMPACTS ON ENERGY. HONOLULU, HI. JULY 27 - AUG 1, 1997. INTERSOCIETY ENERGY CONVERS. vol. 3 & 4, 27 July 1997 (1997-07-27). pages 1052-1056.	

Examiner Signature		Date Considered	
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